

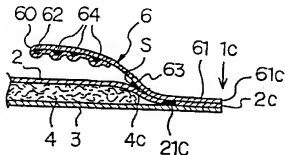
REMARKS

Upon entry of the instant amendment claims 1, 3 and 5-7 will remain pending in the instant application and stand ready for further action on the merits.

The amendments made herein to the claims do not incorporate new matter into the application as originally filed. In this respect, the following is noted.

Claims 1 and 6 are amended herein to clarify that in the claimed absorbent articles *“at least a part of an extended section of said topsheet, which is beyond the basal end of said upstanding gather, is joined to the sheet material for forming the upstanding gather, and said liquid shut-off region is located on a portion of the extended section of said topsheet where the sheet material for forming the upstanding gather joins the topsheet....”* Such a structure recitation finds clear support in the original filed specification at page 3, last paragraph, and in the originally filed drawings, particularly Figures 3 and 4. In Figure 3 (reproduced below), support for the above language can be readily and easily ascertained.

Fig. 3



Claims 1 and 6 have also been amended to clarify that a basal end of the upstanding gather is formed by joining the sheet material to the topsheet at an upper part of each side portion

of the liquid-retentive absorbent core, which also finds support in the original filed specification (e.g., at page 3, last paragraph), and in original Figure 3.

Claims 5 and 6 have additionally been amended to clarify that “a liquid shut-off region is *also located over the widthwise direction of said absorbent article at both or one of the longitudinal end portions of said absorbent article.*” This clarification finds support in the original specification and claims, including Figure 1, wherein the liquid shut-off regions are shown as **21A, 21B** and **21C** on both the longitudinal sides and widthwise sides of the illustrated absorbent article.

It is noted that claims 5 and 6 are not duplicative claims, as claim 6 further requires that the absorbent article “...*does not have a waist upstanding gather, as said upstanding gather, at both or one of the longitudinal end portions of said article....*”

Based on the above considerations, entry of the instant amendment is respectfully requested as is an early and favorable action on the merits.

Examiner Interview (with Examiner Michele Kidwell)

Applicants appreciate Examiner Kidwell's courtesy in holding a personal interview at the US PTO with the undersigned and Mr. Koichi Niinaka of Kao Corporation, on the morning of March 1, 2006. Examiner Kidwell's statements in the “Interview Summary” form resulting from the interview are correct, including her statements with regard to the substance of the interview, and the claims and the prior art discussed in the interview. The Examiner's comments and advice provided to the undersigned in the personal interview are appreciated.

Drawings Objection – 37 CFR § 1.83(a)

The US PTO has objected the drawings under 37 CFR § 1.83(a). Reconsideration and withdraw of this objection is respectfully requested based on the following considerations.

The US PTO contends that “The drawings must show every feature of the invention specified in the claims. Therefore, the [*sic.*] a topsheet that is not thermally bonded to other sheet materials at the liquid shut off region must be shown or the feature(s) canceled from the claim(s).”

However, it is submitted that each of the features recited in the pending claims is already present in the current drawings, and that no additional changes to the drawings are needed to show each of the claimed features of the invention. In this regard, the Examiner need only review current Figures 3 and 4 to discover that they show “a topsheet that is *not* thermally bonded to the other sheets at the liquid shut-off region. For example, in **Figure 3**, see liquid shut-off region 21C, and in **Figure 4**, see “D”, “F” and “E” which denote different possible positions for the liquid shut-off region in the topsheet 2.

Claim Rejections – 35 USC § 112

Claims 1, 3 and 5-7 have been rejected under the provisions of each of 35 USC 112, first and second paragraphs. Reconsideration and withdraw of these two rejections are respectfully requested based on the following considerations.

In the office action, the US PTO contends that the present specification does not provide reasonable enablement for an absorbent article comprising an upstanding gather and a topsheet

that is not thermally bonded to other sheet materials. In reply, the PTO's attention is directed to for example, page 6, line 2 to page 7, line 15 of the instant specification, which is submitted to fully enable and describe this aspect of the claimed invention.

Likewise, while the US PTO may point to page 7, line 23 of the specification to support its proposition of non-enablement, this portion of the specification does not support the US PTO's position. Instead, this section of the specification simply states that the liquid shut-off region in the embodiment described is formed by heat seal. It says nothing about the topsheet being heat sealed to the backsheet. Comments of the US PTO to the contrary are incorrect and must be reconsidered.

As to the language in pending claims 1 and 6 of "*wherein said topsheet is not thermally bonded to other sheet materials at said liquid shut-off region*", it is submitted that this language is fully acceptable and understandable to those of ordinary skill in the art, particularly in view of disclosure at pages 6-7 of the instant specification, which goes into great detail on how the various sheets of the inventive absorbent articles are joined together, and which explicitly states:

"...The topsheet 2 in this embodiment is not thermally bonded to the other sheet materials (the sheet material 61 and the backsheet 3) at the respective liquid shut-off regions 21." (See page 7, lines 10-12 of the instant specification.)

Accordingly, because the pending claims "*particularly and distinctly*" set forth the invention that the applicants regard as their own, and at the same time the pending claims are fully enabled by the instant specification and drawings, it follows that each of the instantly

pending claims are fully acceptable under the provisions of 35 USC § 112. Any contentions of the US PTO to the contrary must be reconsidered.

Claim Rejections – 35 USC § 102(b)

Claims 1, 3 and 5-7 have been rejected under the provisions of 35 USC § 102(b) as being anticipated by *Kitaoka US '637* (US 5,662,637). Reconsideration and withdraw of this rejection is respectfully requested based on the following considerations.

Legal Standard for Determining Anticipation

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art." *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

The Present Invention and Its Advantages

The present invention relates to an absorbent article such as a disposable diaper, which has the characteristics of being: (1) excellent in anti-leak properties, (2) good in workability (or processibility), (3) exhibiting a satisfactory anti-leak effect even when a bulky topsheet is employed, (4) good in productivity and (5) low in manufacturing cost.

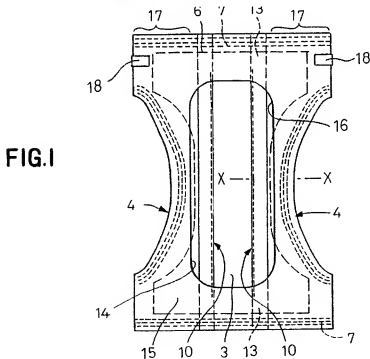
In particular, the present invention provides an absorbent article including a liquid-permeable topsheet, a liquid-impermeable backsheet and a liquid retentive absorbent core interposed between the topsheet and the backsheet, the absorbent article being substantially vertically elongated and having an upstanding gather, wherein the topsheet has a liquid shut-off region in a linear shape which prevents liquid migration within the topsheet beyond the liquid shut-off region, and the liquid shut-off region is located at an area outside the periphery of the absorbent core and is formed independent of a joined section between the topsheet and a sheet material for forming the upstanding gather, and wherein the topsheet is not thermally bonded to other sheet materials at the liquid shut-off region (*e.g., see claim 1*).

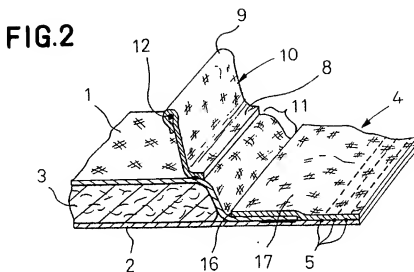
It is also provided in the claims (*see claims 1 and 6*) that at least a part of an extended section of said topsheet, which is beyond the basal end of said upstanding gather, is joined to the sheet material for forming the upstanding gather, and said liquid shut-off region is located on a portion of the extended section of said topsheet where the sheet material for forming the upstanding gather joins the topsheet.

Distinctions Over Kitaoka US 5,662,637

As shown in Figures 1-2 of Kitaoka US '637 (*see below*), Kitaoka's invention contains an exposed zone (11) on the under crotch position of the topsheet (1). The exposed zone (11) causes what is known as the "*wet back phenomena*" meaning that when a baby sits down under its own weight (*e.g., on the floor*) liquid stored in the liquid absorbent core (3) of diaper exudes (*i.e., at the exposed zone (11) of the Kitaoka topsheet (1)*). Notably, in each of Figures 1-2 of Kitaoka US '637, there is not provided any liquid shut-off area in the topsheet (1), or in coversheet (15), which could correspond to the structure recited in instant claim 1. As a result, liquid is not prevented from freely migrating in the topsheet (1) and through the exposed zone (11) of the topsheet.

Figures 1 and 2 of Kitaoka US 5,662,637





Such a “wet back phenomena” is *not* associated with the instantly claimed absorbent articles, because the instantly claimed absorbent articles possess a structure wherein a “*topsheet* has a liquid shut-off region in a linear shape over the longitudinal direction, **which prevents liquid migration within said topsheet beyond the liquid shut-off region**, and said liquid shut-off region is located at an area outside the periphery of said absorbent core and is formed independent of a joined section between said topsheet and a sheet material for forming said upstanding gather, **wherein said topsheet is not thermally bonded to other sheet materials at said liquid shut-off region....**”

Such a “wet back phenomena” is also particularly and advantageously avoided by the following recited structure in instantly pending claim 1 (*which structure is clearly different from the structure shown in Figures 1 and 2 of Kitaoka US 5,662,637*):

...wherein said topsheet extends outward beyond a basal end of said upstanding gather, at least a part of an extended section of said topsheet, which is beyond the basal end of said upstanding gather, is joined to the sheet material for forming the upstanding gather, and said liquid shut-off region is located on a portion of the extended section of said topsheet where the sheet material for forming the upstanding gather joins the topsheet, and

wherein at least a part of the extended section of said topsheet is joined to said backsheet. (See instant claim 1.)

Very similar language to the above language of independent claim 1 is also present in pending independent claim 6.

The distinctions in structure (between Kitaoka US '637 and the instant claims), which are referenced by the above language in the instant claims is most clearly seen upon directly comparing Figure 3 of the present invention with Figure 2 of Kitaoka US '637.

Figure 3 of the Instant Invention

Fig. 3

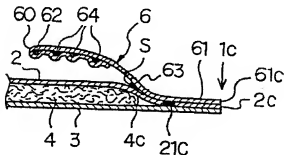
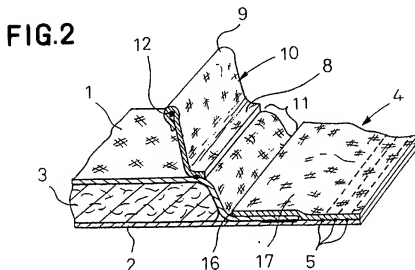


Figure 2 of Kitaoka US 5,662,637



As can be easily seen by reviewing the above Figures, in the instant invention, *see Figure 3*, the sheet material (61) from which the upstanding gather is made, remains joined to the topsheet (2) at the liquid shut-off region (21C) in the topsheet (2), so that any “wet back phenomena” can be successfully avoided.

In contrast to the instant invention, *as shown in Figure 2 of Kitaoka*, the basil end/proximal edge (8) of the Kitaoka upstanding gather clearly stops before and does *not* cover exposed zone (11) of its topsheet (1) and/or any possible liquid shut-off region that might arguably be in the top sheet (*as currently contended by the US PTO*).

As a result, any liquid in the liquid-absorbent core (3) of Kitaoka is freely able to migrate to the Kitaoka’s topsheet (1) and more particularly through exposed zone (11) thereof, to thereby result in a “wet back phenomena” problem.

Moreover, in Kitaoka US '637 at column 4, lines 30-33, it is even disclosed that:

The width of each exposed zone 11 is preferably dimensioned to be less than 5 mm in order to minimize soaking out of liquid excretions possibly taking place through this zone 11.

As such, it is submitted that the above disclosure in the cited Kitaoka US '637 reference clearly supports applicant's current contentions and position that the disclosed absorbent articles of the cited Kitaoka reference have associated therewith a "wet back phenomena" problem and that such absorbent articles are structurally quite distinct and different from the absorbent articles that are instantly recited in the pending claims.

In order to further help the Examiner better understand the importance of the liquid shut-off region in the topsheet of the inventive absorbent articles, the following disclosures in the instant application are additionally noted (*see pages 4-7 of the instant specification*):

The topsheet 2 of the disposable diaper 1 has a liquid shut-off region 21 in a linear shape which prevents liquid migration within the topsheet 2. ... The liquid shut-off regions 21 are located on the opposite longitudinal end portions and the opposite side portions of the diaper 1. The liquid shut-off regions 21A, 21B located on the longitudinal end portions, respectively, are in a linear shape over the widthwise direction of the diaper 1, whereas the liquid shut-off regions 21C, 21C located on the side portions, respectively, are in a linear shape over the longitudinal direction of the diaper 1.... (See page 4, lines 4-18.)

Each liquid shut-off region 21 is formed at a region outside the peripheral edge portion of the absorbent core 4. That is to say, the liquid shut-off regions 21A, 21B are formed at regions outside the opposite end edges in the longitudinal direction of the absorbent core 4, whereas the liquid shut-off regions 21C, 21C are formed at regions outside the opposite left and right side edges in the longitudinal direction of the absorbent core 4. Owing to this feature, even if a body liquid should migrate through the interior of the topsheet, the body liquid would not leak from the peripheral edge portion of the diaper because it would collide against any or some of the liquid shut-off regions so that further movement

of the body liquid is prohibited. That is to say, the leak of a body liquid from the waist portion is prevented by the liquid shut-off regions 21A, 21B and the leak from the leg areas is likewise prevented by the liquid shut-off regions 21C, 21C. (See page 5, lines 10-21.)

As shown in FIGS. 2 and 3, the respective liquid shut-off regions 21 are formed independent of a joined section S between the topsheet 2 and the sheet material 61 for forming the upstanding gather. That is to say, the respective liquid shut-off regions 21 are formed at other regions than a joined section S between the topsheet 2 and the sheet material 61. The liquid shut-off regions 21 are not formed at the time the sheet material 6 for forming the upstanding gather is joined to the topsheet 2. (See page 5, line 26 to page 6, line 1.)

It is preferable that the liquid shut-off region 21 in the present invention be formed independent of a joined section between the topsheet 2 and other sheets (sheet material 61, backsheet 3, etc.). (See page 7, lines 7-10.)

By forming the liquid shut-off region 21 to be independent of the joined section between the sheet material 61 and the topsheet 2, the working (or processing) conditions required at the time of joining the sheet material 61 for forming an upstanding gather are not limited, the sheet material 61 can be joined to the topsheet 2 by an appropriate method even in the case where a bulky nonwoven fabric is used for the topsheet 2. (See page 7, lines 1-6.)

Accordingly, because Kitaoka US '637 completely fails to disclose or teach a liquid shut-off region such as occurs in the structure of the instant inventive absorbent articles, it follows that the same Kitaoka US '637 reference cannot anticipate any of the instantly pending claims, since it does *not* teach or otherwise provide for each of the limitations recited in the pending claims.

Based on the above considerations, the present invention is *not* anticipated by the cited Kitaoka US '637 reference, as it fails to meet all of the limitations of any one of instantly pending claims 1, 3 and 5-7. As such withdrawal of each of the outstanding anticipation rejection is required at present.

Additional Considerations

It is also note that the cited Kitaoka US '637 reference is incapable of rendering the present invention obvious under the provisions of 35 USC § 103(a). This assertion is based on the fact that the Kitaoka US '637 reference fails to provide any teaching, suggestion or motivation to those of ordinary skill in the art that would allow them to arrive at the invention as claimed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the cited art or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

No such motivation is found in the teachings or disclosure of the cited Kitaoka US '637 reference that would allow one of ordinary skill in the art to arrive at the instant invention as claimed.

Conclusion

Based on the amendments and remarks presented herein it is submitted that the cited art is incapable of anticipating or rendering obvious any of instantly pending claims 1, 3 and 5-7. As such the Examiner is respectfully requested to issue a notice of allowance indicating that each of the pending claims allowed and patentable under the provisions of title 35 of the United States Code.

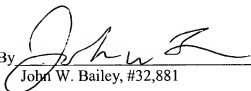
Should there be any questions concerning the present amendment, or any issues remaining after consideration of the instant amendment, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number indicated below, in order to help further prosecution of the present case.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 CFR §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: March 16, 2006

Respectfully submitted,

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By 
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